What technology is driving Zepto's 10-minute grocery delivery service?

Mediboina Sai Kumar

M.Tech '23 @ NIT Surathkal, Karnataka. Email: msaikumar6789@gmail.com

The digital transformation of industries has been fairly dramatic, and the grocery industry is no exception. When someone said, "Let's go shopping," it used to mean going from store to store in the neighbourhood, which took a lot of time. However, the required information may now be verified quickly, and once more, you can make a payment even if you have no cash on hand. This is how the process of digitization has advanced us significantly. Everything around us is being taken over by online enterprises. Due to their rapid growth, users' purchasing experiences now place a premium on speed and efficiency. Online commerce has changed the way that business is now conducted has changed, and customers can now relax in their homes and order anything from anywhere knowing that it will arrive on time, at a reasonable price, and at their doorsteps.

Have you ever heard of a grocery delivery app that takes just ten minutes?

You did read that correctly. After you place your order, groceries will be delivered in just 10 minutes to your door! Introducing the Zepto app, the quickest grocery delivery service in India.

Zepto, grocery delivery within 10 mins:

Aadit Palicha and Kaivalya Vohra, two 19-year-old Stanford dropouts who created the 10-minute fast grocery app Zepto. It is a Mumbai-based firm that provides 10-minute deliveries of necessities. It was launched in 2020. Customers have access to thousands of wellliked items, including dairy, groceries, farm-fresh fruits and vegetables, and more. According to the business, an average delivery takes about 8 minutes and 40 seconds. The 10-minute food delivery service employs an inventory approach to operate, delivering groceries from nearby micro-warehouses.

Zepto created dark stores as a novel solution to some of

the execution issues that other supermarket applications have been experiencing. These shadowy warehouses have enabled Zepto to streamline its processes and provide its customers quick deliveries. Dark storefronts have allowed the firm to expand further into locations with heavy traffic, which has improved those cities' conversion and retention rates.

Tech behind this?

The idea and implementation of Dark Stores have been crucial to Zepto's success. So, what actually are these dark stores and what obstacles did they help overcome?



Retail grocery stores that exist solely to fulfil last-mile pickup and delivery orders are referred to as "dark stores." They are often found a few miles from the consumer, are smaller than a conventional grocery shop, and have a lesser selection of goods in exchange for delivery timeframes of less than an hour

The idea is not new, and similar stores are widespread in the USA, Russia, and other developed economies. However, the difficulty in beginning operations in India was due to the nation's chaotic traffic and crowded streets. As a result, the location and planning of the "Dark Stores" became crucial. Zepto appears to have perfected the methodology used to choose these outlets' locations in India, since it presently has more than 40 dark stores in various cities.

Connectivity is the second issue that the dark stores have

shown to help Zepto with. Without dark stores, last-mile connection would not have been possible due to the breadth of the country and the presence of people practically everywhere.

Managing the amount of supplies is another difficulty that India is accustomed to. Dark stores are normally used to stock a smaller range of goods, so Zepto must have given careful consideration to how to handle the variety that comes along with the volume of deliveries in each Indian metropolis.

Overall, Zepto has been successful with its setup and infrastructure approach and is on a solid growth trajectory.

Conclusion:

Zepto is making news because of how quickly it moves. Nevertheless, quick delivery does not sacrifice quality. One of India's start-ups with the quickest growth is this one. Customers are responding positively to the company's miraculous 10-minute product delivery. Their mission is to 'make 10-minute delivery normal'. Even though it seems so absurd to us, it's actually working...

About the Author



Saikumar Mediboina is currently pursuing his masters in Information Technology at the National Institute of Technology Karnataka Surathkal. His area of interest is networking. He is currently working in tactile internet to achieve the low end to end latency and high reliability Haptic media type with http and other protocols Synchronization of multi modal data distributed to multiple devices and location.

...Contd. from page 11

of the data through a process called Data Profiling, which is used to examine the quality and structure. The data can be ingested either batch ingestion or streaming ingestion. Batch Ingestion is a sequential processing where the set of data records can be extracted and processed together. These batch processes can be scheduled or triggered manually. In Stream ingestion a single record of data can be processed automatically from the data source as soon as it is created or in time windows which can be used to give near real time data.

This ingestion or extraction frequency depends on the

requirement on how the subsequent application need the data to be loaded.

Transformation:

Once the data extraction is done, we can transform the data into the required format of the destination system, which helps to analyze the data.

Destination:

A destination is a data warehouse, a database or a data mart to hold the data after the data is processed.

About the Author



Lohit Ravi Teja Bhupati is currently working as Data Engineer at Walmart, Arkansas. He has done Masters thesis in Machine learning and Neuro imaging from University of Houston Clear lake, USA. With his interest towards Machine learning and data analysis, he is always upscaling by learning new technologies and continuing his passion.